From: Marc Greenberg To: Eric Delgado

Cc: Jon Rauscher; Christopher Ruhl; Matthew Loesel; Paige Delgado; Philip Turner; R6 DWH REOC ESC@EPA;

Valmichael Leos

Subject: Re: TPH and hydrocarbon test kits

Date: 05/29/2010 08:41 AM

OK if that's going to be your decision. But would such a decision be based on a logistics concern or on a data type concern. In other words, is it felt that it will be too difficult to pull the analysis off, or is it more along the lines of the semi-quantitative nature of the data? Good for screening level, presence/absence info, but not definitive quantitation.

Marc S. Greenberg greenberg.marc@epa.gov

Message sent via EPA wireless device

----Eric Delgado/R6/USEPA/US wrote: ----

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To: Jon Rauscher/R6/USEPA/US@EPA
From: Eric Delgado/R6/USEPA/US
Date: 05/28/2010 09:54PM
Cc: Christopher Ruhl/R6/USEPA/US@EPA, Marc Greenberg/ERT/R2/USEPA/US@EPA, Matthew
Loesel/R6/USEPA/US@EPA, Paige Delgado/R6/USEPA/US@EPA, Philip Turner/R6/USEPA/US@EPA, R6 DWH REOC
ESC@EPA, Valmichael Leos/R6/USEPA/US@EPA
Subject: Re: TPH and hydrocarbon test kits

I'm very familiar with the immunoassay procedure. I utilized a similar test at the SESCO removal and do not feel that performing the analysis on the types of boats that would be used on the near shore assessment would be a good field decision. Chris and Paige worked on thy project and would most likely agree.

Eric Delgado Federal On-Scene Coordinator US EPA Region 6 1445 Ross Ave (6SF-PR) Suite 1200 Dallas, TX 75202 214-437-9809

----Jon Rauscher/R6/USEPA/US wrote: ----

To: Eric Delgado/R6/USEPA/US@EPA From: Jon Rauscher/R6/USEPA/US Date: 05/28/2010 07:00PM

Leos/R6/USEPA/US@EPA
Subject: Re: TPH and hydrocarbon test kits

Depends on the boat. The boat will have to have a power hookup. If the boat has a DC Depends on the boat. The boat will have to have a power hookup. If the boat has a DC electrical power (cigarette lighter), a DC/AC power convert could be used to provide a 110 volt electrical power supply. Greenberg and I have done fieldwork over last few years where we used an inverter to recharge batteries for hand drills, run a printer, and charge a notebook computer. Running the spectrophotometer in the test kit should not be a problem.

Valmichael

The information states that an operator with minimum chemistry skills can be trained to conduct the test. The reagents are dispensed using an Eppendorf Repeater Pipettor. The pipette dispenses a measured volume by pressing one button. Pipetting on a boat would be a little challenging but not impossible.

Eric Delgado/R6/USEPA/US

TO: Marc Greenberg/ERT/R2/USEPA/US@EPA

Cc: Jon Rauscher/R6/USEPA/US@EPA, Matthew Loesel/R6/USEPA/US@EPA, Paige Delgado/R6/USEPA/US@EPA,
Philip Turner/R6/USEPA/US@EPA, R6 DWH REOC ESC@EPA, Valmichael Leos/R6/USEPA/US@EPA

Date: 05/28/2010 06:15 PM

Date: Do: TDW and budgespan hart bits

Subject: Re: TPH and hydrocarbon test kits

but do they work on a boat?

Eric Delgado Federal On-Scene Coordinator US EPA Region 6 1445 Ross Ave (6SF-PR) Suite 1200 Dallas, TX 75202 214-437-9809

---- Marc Greenberg/ERT/R2/USEPA/US wrote: ----

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To: Jon Rauscher/R6/USEPA/US@EPA From: Marc Greenberg/ERT/R2/USEPA/US Date: 05/28/2010 02:25PM

Cc: Eric Delgado/R6/USEPA/US@EPA, Matthew Loesel/R6/USEPA/US@EPA, Paige Delgado/R6/USEPA/US@EPA,

For what it's worth, I agree with your assessment below. Additionally, I have been involved on projects where our technicians used RaPID Assay Kits. They worked well.

Marc S. Greenberg, Ph.D.
Environmental Toxicologist
U.S. EPA - Environmental Response Team
2890 Woodbridge Ave., Bldg. 18
Edison, NJ 08837
+ 732 452 6413 (T)
+ 732 321 6724 (F)
greenberg.marc@epa.gov

From: Jon Rauscher/R6/USEPA/US
To: Matthew Loesel/R6/USEPA/US@EPA, Valmichael Leos/R6/USEPA/US@EPA, Paige
Delgado/R6/USEPA/US@EPA, Eric Delgado/R6/USEPA/US@EPA
Cc: Philip Turner/R6/USEPA/US@EPA, Marc Greenberg/ERT/R2/USEPA/US@EPA, R6 DWH REOC ESC@EPA
Date: 05/28/2010 12:21 PM
Subject: TPH and hydrocarbon test kits

The enzyme linked immunosorbant assays (ELISA) test kits appear to be the most promising field analysis. The colorimetric test kits using the Friedel-Crafts reaction (e.g., Hanby Test Kit) receive poor evaluations and do not appear to be promising for field analysis.

The ELISA test kit that received good evaluations is the SDI BTEX/TPH RaPID Assay Kits. The limitations of the RaPID kits is the need for electrical power (120 volt) and is the inability to differentiate between BTEX and related compounds.

[attachment "RaPID ASSAY t00102.pdf" deleted by Marc Greenberg/ERT/R2/USEPA/US] [attachment "CTPN200525\_RaPID BTEXandTPH.pdf" deleted by Marc Greenberg/ERT/R2/USEPA/US]

[attachment(s) "RaPID Assay User Guide.pdf" removed by Eric Delgado/R6/USEPA/US]